

LASSEN VOLCANIC NATIONAL PARK

ANNUAL REPORT ON INSECTS HARMFUL TO THE FOREST -1935

EUGENE BARTON
LASSEN VOLCANIC NATIONAL PARK
NOVEMBER 13, 1935

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Damage to the forest by insects has been light this year, slightly less infestation being apparent than usual during the past few years. Abundant soil moisture remaining throughout the summer as a result of the heavy snowfall of the past winter has probably enabled the trees to combat insect attacks very successfully. Control work which was carried on during the seasons of 1932, 1933 and 1934, has, of course tended to clean up a great deal of infestation.

Though the condition anywhere in the park could hardly be classed as anything more dangerous than normal endemic; continuing of control work, particularly near campgrounds and developed areas wherever infestation is present, is strongly recommended in order to prevent possible dangerous outbreaks.

A survey of the general observation type covering the entire park was made during the last week of August by Entomological Technician Donald De Leon, accompanied by one of our two permanent rangers. No copy of De Leon's report has been received at this office. However, the writer received a verbal report of the survey, which has been supplemented with observations made in connection with other duties. No strip cruises nor detailed topographical surveys have been made.

In the vicinity of the fireguard cabin at Horseshoe Lake a number of lodgepole pine trees have been attacked by the mountain pine beetle (Dendroctonus monticolae). Control work was done here in the fall of 1932, consisting of felling and treating all the infected trees which could be found in the immediate vicinity. Obviously, the infestation was not cleaned up by this former work. Although the condition at Horseshoe Lake is by no means epidemic, and thinning of the timber, particularly around the cabin would be an improvement rather than a detriment; some control work was recommended by Entomologist De Leon and should not be neglected next year. No other dangerously infested area was found among any of the lodgepole stands of the park.

Across the northern side of the park, from Manzanita Lake to Butte and Widow Lakes, the forest has a large percentage of jeffrey pine, and here a very few infested and dying trees were found. The damage is due to the jeffrey pine beetle (Dendroctonus jeffreyi). This area of forest in general appears in healthy condition. However, regular control work to clean up spots of infestation, particularly near Butte and Manzanita Lakes, where any epidemic among the campground trees would be disastrous, is recommended.

Throughout the red fir stands, the forest type usually prevalent between the 6500 and 8000 foot altitudes, dying of twigs, occasional tops and a few whole trees has been noted. According to former investigations this is the work of the fir engraver beetle (Scolytus ventralis) and the Sierra fir beetle (Tetropium abietis) aided by weakening of the trees by mistletoe infection. The infestation and annual damage in the red fir stands has not varied noticeably during the past five years. It is not of sufficient extent to impair seriously the good appearance of the forest. Dead fir trees and limbs decay and fall very quickly. The principle harm caused by the insect infestation in our fir forests is the accumulation of down timber and debris which creates a fire hazard.

Aspens and other deciduous types are in apparently healthy condition throughout the park.

There is no indication that insect infestations have ever been epidemic in this park, nor apparent danger of their becoming so in any part of the park. However, it is believed that a closer check on the condition should be kept in the future in order to anticipate any trends or increases in activity of harmful species of insects. Definite representative areas for strip cruises and topographical surveys should be layed off, surveys made annually on these areas and the results tabulated. A thorough general reconnaissance annually should also be made.

Respectfully submitted,

Eugene Barton
Park Ranger

11/13/33

Note: Since this report was written a letter dated Sept. 5, apparently transmitting Dr. De Leon's report has been found, but we have no copy of this report

1935 ANNUAL FOREST INSECT REPORT

Park Lassen Volcanic Ranger District Entire park

Date of Field Survey Aug. 24-31 Time spent on survey 5 days

Method employed (general observations, sample strip, topographic)

General observations

What is the general situation in your district?

Low normal endemic infestation, not particularly serious in any

part of the park

If there are any special areas where insect losses are now serious or threaten to become so, answer the following questions, using additional forms if more than one special area is reported:

Name of area affected East side Horseshoe Lake No. acres 15

Timber type lodgepole pine Range in elevation 6500 feet, no range

Tabulate below your estimate of the number of trees that died from insect attack on this area during the past season:

| Tree Species | Mature Trees | Second Growth | Reproduction |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <u>lodgepole pine</u> | <u>12</u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> |

Do the dying trees occur singly or in groups? singly

Give average number of trees in group

Are the losses increasing, decreasing, or about the same as last year?

about the same

What insects appear to be responsible for the damage (barkbeetles, borers, defoliators, unknown)? barkbeetles

Remarks:

Approved Nov. 14, 1935 (date) Submitted November 13, 1935 (date)

By Eugene Barton (name)

Park Supt. Sgd/ E. P. Leavitt Ranger (title)
(Signature)

(NOTE: Please supplement this outline with a detailed report of any important infestations.)

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Summary of Ranger District Data, Recommendations for Control and Costs*

Lassen Volcanic National Park
~~Monument~~

| Ranger District | Name of area ¹ in which control is needed | Insect to be controlled | Tree species | Acres of infestation | Estimated No. of infested trees | Estimated cost per tree | Estimated total cost |
|-----------------|--|--|-------------------|----------------------|---------------------------------|-------------------------|----------------------|
| -- | Horseshoe Lake | barkbeetle (<i>Dendroctonus</i> Monticolae) | lodgepole pine | 15 | 20 | \$10.00 | \$200.00 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Note: An amount of \$400.57 is available for use in our account FP 375, Fall Insect Control. The control work here recommended could not be accomplished this fall on account of an early and heavy snow fall.

This is a maintenance project.

Approved Nov. 14, 1935
(Date)

Sgd. E. P. Leavitt
(Superintendent or Custodian)

Submitted by: Eugene Barton

Ranger
(Title)

Nov. 13, 1935
(Date)

* To be filled out by the officer designated by the superintendent to give special attention to insect matters within the park, as stated in the Manual of the Branch of Forestry, 1935.

¹ State in footnote whether maintenance or a new project

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
LASSEN VOLCANIC NATIONAL PARK
MINERAL, VIA RED BLUFF, CALIF.

OFFICE OF THE SUPERINTENDENT

November 14, 1935
Entomology and Plant Quarantine
RECEIVED
★ NOV 17 1935 ★
Forest Insect Laboratory,
BERKELEY, CALIF.

Chief Forester,
National Park Service,
Washington, D. C.

Dear Mr. Coffman:

The annual report of insect conditions has been prepared as directed in your memorandum of October 14, 1935 and is submitted herewith.

No control projects were carried on the past season.

Very truly yours,

E. P. Leavitt
Superintendent

EB

Incl. #407490

CC: Berkeley Office, NPS Forestry
Bureau of Entomology, Berkeley
Park files